



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,796	12/20/2000	Robert H. Montgomery JR.	K-1744	8446

7590

11/21/2002

John J. Prizzi
Kennametal Inc.
P.O. Box 231
Latrobe, PA 15650

EXAMINER

KRECK, JOHN J

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,796

Applicant(s)

MONTGOMERY, ROBERT H.

Examiner

John Kreck

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-11, 13 and 15-35 is/are pending in the application.
- 4a) Of the above claim(s) 29-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10, 11, 13, 15, 16 and 18-28 is/are rejected.
- 7) ☒ Claim(s) 9 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The amendment dated 8/13/02 has been entered.

Election/Restrictions

1. Newly submitted claims 29-35 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The new claims and the originally presented claims are related as subcombination and combination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require the angled retainer. The subcombination has separate utility such as in a not-tapered sleeve.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 29-35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 19 and 21 lack antecedent basis for "said male member" and "said female member".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 8, 10, 11, 13, 18, 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchey, et al. (U.S. Patent Number 5,628,549) in view of LeBegue, et al. (U.S. Patent number 4,299,424).

The Ritchey patent shows an apparatus for mounting a cutting tool comprising a bit holder (112); a protective wear sleeve (114); the sleeve having an external portion and a portion that is adapted to be received in the holder; the wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion (170), and a retainer whereby once the sleeve is set in the bit holder by blows with a

Art Unit: 3673

hammer the sleeve will remain without relative rotation or axial movement. Ritchey fails to show the tapered portion.

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 1, in order to reduce stress on the base.

The Ritchey patent also shows the retainer is generally a cylindrical split sleeve retainer having beveled portions (see figures 6 or 10) as called for in claim 8.

Regarding independent claim 10:

The Ritchey patent shows a joint coupling comprising a female member (112); a male member (114); the male member having an external portion and a portion that is adapted to be received in the female member; the male member portion that is adapted to be received including a rearward disc end portion, an annular groove portion (170), and a retainer whereby once the male member is set in the female member the male member will remain without relative rotation or axial movement. Ritchey fails to show the tapered portion.

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

Art Unit: 3673

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 10, in order to reduce stress on the base.

The Ritchey patent also shows the retainer (116) positioned as called for in claim 11.

With regards to claim 13; Ritchey shows the female portion having a cylindrical portion, but fails to show the tapered portion. LeBegue teaches that it is desirable to include tapered portions in portions of similar tools, leBegue also teaches a rearward cylindrical portion. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 13, while retaining a rear cylindrical portion in order to reduce stress on the base.

The Ritchey patent also shows the retainer is generally a cylindrical split sleeve retainer having beveled portions (see figures 6 or 10) as called for in claim 16.

Regarding independent claim 18:

The Ritchey patent shows a cutting tool assembly comprising a bit holder (112); a protective wear sleeve (114); the sleeve having an external portion and a portion that is adapted to be received in the holder; the wear sleeve portion that is adapted to be

Art Unit: 3673

received including a rearward disc end portion, an annular groove portion (170), and a retainer whereby once the sleeve is set in the bit holder by blows with a hammer the sleeve will remain without relative rotation or axial movement and wherein the retainer is biased outwardly. Ritchey fails to show the tapered portion.

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 18, in order to reduce stress on the base.

Regarding independent claim 19:

The Ritchey patent shows a cutting tool assembly comprising a bit holder (112) with a rear cylindrical portion; a protective wear sleeve (114); the sleeve having an external portion and a portion that is adapted to be received in the holder; the wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion (170), and a retainer whereby once the sleeve is set in the bit holder by blows with a hammer the sleeve will remain without relative rotation or axial movement and wherein the retainer is biased outwardly. Ritchey fails to show the tapered portion.

Art Unit: 3673

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 19, in order to reduce stress on the base.

Ritchey also shows the shoulder as called for in claim 20.

Regarding independent claim 21:

The Ritchey patent shows a cutting tool assembly comprising a bit holder (112) with a rear cylindrical portion; a protective wear sleeve (114); the sleeve having an external portion and a portion that is adapted to be received in the holder; the wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion (170), and a retainer whereby once the sleeve is set in the bit holder by blows with a hammer the sleeve will remain without relative rotation or axial movement and wherein the retainer is biased outwardly. Ritchey fails to show the tapered portion.

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

Art Unit: 3673

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as called for in claim 21, in order to reduce stress on the base.

2. Claims 2, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchey and Lebegue as applied to claim 1 above, and further in view of Stewerf, Jr. (U.S. Patent number 5,370,448).

Lebegue fails to show the angle of taper. Stewerf teaches a taper of 6°. It is apparent that the angle taught by Stewerf is effective to help prevent rotation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Ritchey system to have a taper angle of between 5.5-7° as called for in claim 2, to help prevent rotation.

Ritchey also shows the retainer positioned around the groove as called for in claim 3.

With regards to claim 5; Ritchey shows the female portion having a cylindrical portion, but fails to show the tapered portion. LeBegue teaches that it is desirable to include tapered portions in portions of similar tools, LeBegue also teaches a rearward cylindrical portion. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Ritchey system to have included a tapered

Art Unit: 3673

portion as called for in claim 5, while retaining a rear cylindrical portion in order to reduce stress on the base.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Ritchey system to have a taper angle of between 5.5-7° as called for in claim 6, to help prevent rotation.

3. Claims 7, 15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchey and Lebegue as applied to claims 1, 10 and 19 above, and further in view of Bitelli (U.S. Patent number 6,086,160).

Ritchey fails to show the external portion adjacent to the tapered portion having a shoulder and rounded undercut portion which weakens and fails first.

Bitelli shows a similar sleeve which includes a shoulder and rounded undercut portion which weakens and fails first, which prevents the sleeve from breaking in the bore.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Ritchey system to have a shoulder and rounded undercut portion which weakens and fails first, as called for in claims 7, 15 and 22, in order to prevent the sleeve from breaking in the bore.

3. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchey and Lebegue and further in view of Bitelli (U.S. Patent number 6,086,160).

Ritchey fails to show the tapered portion.

Art Unit: 3673

LeBegue teaches that it is desirable to include tapered portions in portions of similar tools which are received in the holder. This is done to reduce stress on the base member (see col. 2, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Ritchey system to have included a tapered portion as in order to reduce stress on the base.

Ritchey also fails to show the external portion adjacent to the tapered portion having a shoulder and rounded undercut portion which weakens and fails first.

Bitelli shows a similar sleeve which includes a shoulder and rounded undercut portion which weakens and fails first, which prevents the sleeve from breaking in the bore.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Ritchey system to have a shoulder and rounded undercut portion which weakens and fails first, as called for in claims 23, 24 and 25, in order to prevent the sleeve from breaking in the bore.

Ritchey also shows the retainer as called for in claims 26 and 27.

Ritchey also shows the retainer positioned in the annular groove as called for in claim 28.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 10, and 18 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3673

Allowable Subject Matter

3. Claims 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on M-F 6:00 am - 3:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are

Art Unit: 3673

(703)305-3597 for regular communications and (703)305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-4177.

JJK
November 15, 2002


DAVID BAGNELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600